Virtual consultations in the lung cancer pathway

What works for patients and healthcare professionals?



Job code: GB-NON-03590 Date of Preparation November 2020

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DISCLAIMER

Written and prepared by Merck Sharp & Dohme UK (MSD) Limited with advice and input from representatives of the British Thoracic Oncology Group (BTOG), Lung Cancer Nursing UK (LCNUK), UK Lung Cancer Coalition (UKLCC) and the Roy Castle Lung Cancer Foundation.

MSD commissioned Healthcare Research Worldwide to conduct two surveys of patients and healthcare professionals respectively. Advice and input on the survey questions was received from the BTOG, LCNUK, Roy Castle Lung Cancer Foundation and the UKLCC and the organisations facilitated dissemination of the survey amongst their networks.

Foreword

Lung cancer is a complex and often fatal disease. Many patients won't realise there is something wrong until the disease has begun to spread. There is a need for speed at all stages of the lung cancer patient pathway: immediately following diagnosis when treatments are being explored, and later in the palliative stage of the disease. Patients have to come to terms with their diagnosis quickly, and high quality communication with their medical team is crucial in this.

When the COVID-19 pandemic hit, healthcare professionals across the NHS went to extraordinary lengths to keep patients as safe as possible. This was especially important in lung cancer, where patients are at particular risk of complications of coronavirus due to their underlying condition and the immunosuppression associated with many treatments. The move from in person to 'virtual' consultations was essential, but we are now interested in how this enforced shift during the first wave of the COVID-19 pandemic has affected both people living with lung cancer and the hospital clinical teams looking after them. This is particularly relevant because virtual consultations have been suggested to have the potential to speed up the diagnostic treatment pathways.

The results presented here, of lung cancer patients, their carers and the clinical community, are a fascinating important insight into the use of virtual consultations in lung cancer care. The survey revealed that 'virtual' really meant 'telephone' for most patient appointments - very few were conducted via video. One of the most striking findings was that, as the first wave subsided, many secondary care lung cancer services quickly moved back to face to face consultations, demonstrating the need and importance of human interaction.

It is likely that virtual consultations will increase as a means to deliver care in the future NHS as a whole. In the right circumstances, and with the necessary infrastructure and support for healthcare professionals, video and telephone consultations could offer lung cancer patients quicker access to the expertise that is needed for their care. Since the pandemic began in March 2020, healthcare professionals have been developing the skills needed for effective virtual consultation - especially in communication, organisation, and prioritisation. However, non-verbal communication, relationship-building and trust remain a vital part of lung cancer patient care and, for these reasons as well as the others detailed in the report, virtual appointments will complement but never replace face to face meetings.

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Executive Summary*

Key findings

Patients

- The pandemic caused most patient consultations to move to 'virtual', but for most this has meant telephone consultations. Only a small proportion of patients have had a video consultation.
- Most lung cancer patients prefer in person consultations. They feel they miss information and find it harder to communicate concerns that are important to their treatment and wellbeing when appointments are switched to the telephone.
- Most patients have not been offered video consultations as an option. Very few patients said they did not want or know how to video call (but as the survey was online, it selects for people who have access to a computer so more research is needed to understand the preferences of people who do not have computer access).
- The small number of patients who have used video see clear advantages and more than half saw no disadvantages.
- Patients would be happy with a higher proportion of virtual consultations in future than before the pandemic. Telephone remains the more popular form of virtual consultation among patients, particularly for routine follow-up but, for lung cancer patients, nothing will replace face to face.

 This is particularly true for finding out their diagnosis or for their first consultation, for which 95% of patients said meeting in person is best.

Healthcare professionals

- Most healthcare professionals have been picking up the phone or still attempting to see lung cancer patients face to face during the pandemic, and they are **not routinely** using video for patient consultations.
- The majority of healthcare professionals responding to our survey believe face to face appointments are the best option for most purposes, especially breaking bad news, and they do not think there are many benefits of virtual consultations beyond protecting and reassuring patients during the pandemic.
- Healthcare professionals believe virtual consultations are more convenient for patients but not necessarily convenient for them. The majority do not see them as saving healthcare professionals' time.
- Respondents believe training, increased access to computers across the NHS, better internet connections (in Trusts and patients' homes) and quiet spaces within hospitals are needed to improve virtual consultations.

Virtual consultations were rapidly introduced to protect patients during a global pandemic. However, if this method of communication between patient and their medical team is to be adopted long-term, research is needed in order to ascertain whether patients are benefitting.

MSD commissioned two surveys - developed and disseminated in collaboration with the BTOG, LCNUK, Roy Castle Lung Cancer Foundation and the UKLCC - to understand the experiences and opinions of lung cancer patients and healthcare professionals of virtual consultations before, during and after the pandemic, and how they see this form of communication being used in future.

There was a striking similarity between the lung cancer patients' and healthcare professionals' responses. Both parties understood and responded positively to the need to move to virtual consultations during the height of the pandemic where there was real and present danger in travelling to hospital. However, it seems both patients and professionals find meetings in person more effective and productive. Over the summer months as COVID-19 cases declined, many secondary and tertiary care services moved back to face to face and increased the proportion of lung cancer consultations delivered in person.

The fact that video is so seldom used to deliver virtual consultations for lung cancer patients may surprise some people – but perhaps not those working within NHS hospitals. This survey reveals some of the infrastructure changes that will have to happen to make video consultations workable in secondary or tertiary care settings long-term.

The findings suggest that hospitals currently do not have the necessary IT equipment or infrastructure to make video consultations more routine. Healthcare professionals report that there are not enough computers and laptops, and the broadband in hospitals is not of sufficient speed to allow conversations to flow uninterrupted by connection loss. Video consultations also require a quiet space where conversations are not drowned out by background noise, and quiet spaces are at a premium in hospitals. Due to some of these issues, video consultations can often take longer than face to face meetings with patients, and therefore the potential benefit to the NHS in improving efficiency and capacity is lost. The speed at which virtual consultations were adopted meant that healthcare professionals simply got on with the job, and there was little time for training on new platforms or how conversations with patients could be handled differently when not in person. The surveys show that additional training would be valued by many health professionals, and this should be an area to consider if virtual consultations are to be embedded as standard practice. There may be more that we can learn from colleagues in primary care (who were not the focus of this survey) or from geographical areas or practice specialisms that were using virtual technology to support secondary care consultations prior to the pandemic.

Every patient worries about getting bad news and for healthcare professionals, breaking bad news is one of the hardest aspects of the job. The surveys suggest that healthcare professionals do not find virtual consultations appropriate in this situation. The survey found face to face consultations were also best for conversations around diagnosis, when a patient's disease has progressed or if there is a need to change their treatment or move to palliative care. These crucial points in the patient journey require complex and sensitive discussions when simply picking up the phone is not good enough.

It is encouraging to see that in some situations, particularly routine appointments or responding to queries, there are some healthcare professionals and many patients who are open to, or indeed prefer, virtual consultations. But given the surveys were conducted online, more research is needed to understand the views of those lung cancer patients who do not have access to or feel confident using a computer. Any changes to the way consultations are conducted must not inadvertently exacerbate health inequalities.

^{*}The data collected from the patient/carer and healthcare professionals surveys described in this report is held on file by MSD.ⁱ

Introduction

The Covid-19 pandemic has had an enormous impact on the NHS. The need to introduce social distancing, particularly for people clinically extremely vulnerable to the virus, meant face to face medical appointments were swiftly replaced by virtual consultations in order to protect patientsⁱⁱ. Many lung cancer patients are considered to be clinically extremely vulnerable to Covid-19ⁱⁱⁱ and lung cancer teams have been working especially hard, quickly adapting existing practices and procedures, to use virtual meetings to support patient care.

Although virtual consultations – either over the telephone or using digital platforms that allow video calling – were accelerated to help protect patient safety during the pandemic, NHS leaders have for some time been considering and exploring increasing their use to help improve efficiency in the service and offer more care out of hospital settings^{vi,v}. However, if the use of virtual appointments is to be retained long-term, it is important that the advantages and disadvantages for both patients and healthcare professionals are thoroughly assessed so that future guidance and tools can support virtual consultations that are better for all.

Since the beginning of the pandemic there has been little chance to capture how the transition to virtual consultations works in practice, how patients feel about them, and what makes for a 'good' consultation. Charities and research groups are starting to explore this^{vi}, but as yet there has been little research into the experience of patient communities with specific conditions. In lung cancer, sadly, many patients won't have much time from their diagnosis – a very different proposition from someone with a long term condition managing their disease in primary care. For these patients, having easy contact with their care team is crucial. Lung cancer therefore warrants specific guidance, beyond the existing general clinical guidance for the management of remote consultations, *i*,vii and that is guided by the views of patients.

Key considerations

- These surveys were conducted online, and therefore the views of lung cancer patients who don't have computer access haven't been captured. Further research is needed into the use of virtual consultations involving patients who do not have computer access or feel confident in using them to ensure health inequalities aren't being exacerbated.
- Given the often late stage diagnosis and urgency that comes with it, there is a need for lung cancer-specific best practice guidelines on the use of virtual consultations to help improve both the patients and healthcare professionals' experience of this form of communication. This could serve to ensure recognition of the importance of patients having a choice of their preferred method of contact with their medical team, as well as recommending that all lung cancer patients – with the possible exception of people who live in remote areas far away from their medical teams – are seen face to face when new information is being delivered.
- Resource will be needed if NHS Trusts are to invest in the technology needed to make virtual consultations an integral part of the patient pathway. This is applicable beyond lung cancer, in other cancer services and the wider NHS.
- Training for healthcare professionals in best practice for delivering telephone and video consultations, as well as training in how to use computer equipment and virtual consultation software, could help improve both the patient experience and that of their medical teams.

To that end, MSD commissioned a survey of lung cancer patients and carers as well as the clinical community. In collaboration with the Roy Castle Lung Cancer Foundation, researchers surveyed lung cancer patients and carers to gather their views and learn more about their experience of virtual consultations – both telephone and video. In parallel, with support from the BTOG, LCNUK, and the UKLCC, researchers surveyed lung cancer specialist healthcare professionals to understand how they are using, and feel about, virtual consultations, both to support lung cancer patients and to work as a multidisciplinary team (MDT).

This report brings together the key findings from the two surveys, providing a more holistic picture of experiences and preferences from patients' and healthcare professionals' points of view.

From the findings we have drawn out key considerations for the lung cancer community that could help improve the use of virtual consultations for those patients that wish to have them, and ultimately lead to consultations that are better for lung cancer patients, healthcare professionals and the NHS.

Methodology

This report describes the findings from two separate online surveys. The first survey was undertaken to better understand the views and experiences of lung cancer patients or their carers regarding virtual appointments – both over the telephone and in video calls. The second survey was aimed at understanding the views and experience of lung cancer healthcare professionals of using virtual consultations to support lung cancer patients.

MSD commissioned professional market research consultants at Healthcare Research Worldwide (HRW) to conduct the two surveys. Survey questions were developed by MSD in collaboration with the BTOG, LCNUK, Roy Castle Lung Cancer Foundation and the UKLCC, supported by healthcare policy consultants Incisive Health and HRW. BTOG, LCNUK, UKLCC and the Roy Castle Lung Cancer Foundation facilitated dissemination of the surveys among their networks.

The surveys were conducted via online questionnaires, in accordance with the Data Protection Act, Market Research Society, Association of the British Pharmaceutical Industry and British Healthcare Business Intelligence Association guidelines. The survey questions can be found in Appendix I.

The surveys were open from 29 September to 19 October 2020. The patient and carer survey was shared by Roy Castle Lung Cancer Foundation through its patient and supporter networks and promoted on social media. The healthcare professional survey was shared by BTOG, LCNUK and the UKLCC through their professional networks and promoted on social media. Not every individual answered every question. Throughout the report we have indicated the number of respondents to the specific question.

Only one GP responded to the healthcare professionals survey, therefore the results are not reflective of the experiences and opinions of those who deliver care in a primary setting.

As the surveys were online only, the partners recognise that there will be a group of patients and carers who do not have computer access and whose views have therefore not been captured here. Further research is needed to understand these patients' experience of telephone consultations during the COVID-19 pandemic, and to what extent they feel telephone consultations meet their needs versus face to face appointments.

Findings from the patient and carer survey

The data collected from the patient/carer survey described in this section is held on file by MSD.ⁱ

Key points

- The pandemic caused most patient consultations to move to 'virtual', but for most this has meant telephone consultations. Only a small proportion of patients have had a video consultation.
- Most lung cancer patients prefer in person consultations. They feel they miss information and find it harder to communicate concerns that are important to their treatment and wellbeing when appointments are switched to the telephone.
- Most patients have not been offered video consultations as an option. Very few patients said they did not want or know how to video call (but as the survey was online, it selects for people who have access to a computer so more research is needed to understand the preferences of people who do not have computer access).

- The small number of patients who have used video see clear advantages and more than half saw no disadvantages.
- Patients would be happy with a higher proportion of virtual consultations in future than before the pandemic. Telephone remains the more popular form of virtual consultation among patients, particularly for routine follow-up but, for lung cancer patients, nothing will replace face to face.
- This is particularly true for finding out their diagnosis or for their first consultation, for which 95% of patients said meeting in person is best.

Survey responses

The patient survey received 105 responses from 97 patients and 8 carers representing the lung cancer patients they support. **81% identified themselves as female and 19% as male.** Most of the respondents (90%) were between the ages 40 and 69, 2% were aged 15-39 and 8% were over 70 years of age.

Some 13% of respondents were diagnosed with lung cancer during the COVID-19 national lockdown in the UK, after March 2020. The majority of respondents were diagnosed before lockdown at the end of March: 13% in the first three months of 2020, 28% in 2019, and 15% in 2018. However nearly a third of respondents have been living with the disease for some years: 20% were diagnosed between 2015-2017 and 11% were diagnosed before 2015.

Most of the respondents (65%) are either living with or caring for someone with stage IV lung cancer; 12% had stage III, 11% stage II, 8% stage I and 4% were unsure. The majority (85%) of patients have a family member or carer who helps them, but 15% do not.

Of the lung cancer patients who have had virtual consultations during the pandemic:



Lung cancer care during the pandemic

Contact with healthcare professionals

Most respondents had discussed their cancer and treatment with an oncologist (89%) or lung cancer specialist nurse (70%) during the pandemic, and these healthcare professionals were their most frequent points of contact. 36% had discussed their cancer and treatment with an oncology nurse, 27% with a respiratory physician, 16% with a radiologist, 16% with a GP and 12% with another healthcare professional. No one had spoken to a surgeon.

Since the start of the pandemic, 92% of the 105 respondents (97 people) have had at least one conversation with their healthcare team virtually. **However, the vast majority of virtual contacts were over the phone:** 90% of the 105 respondents (95 people) have had at least one telephone consultation. 13% (14 people) have had at least one video consultation. Of the 14 patients who had used video, nine patients used NHS Attend Anywhere, two used Zoom, one used Skype and two had used other platforms.

Three fifths (60%) of the 105 respondents (63 people) had seen a member of their medical team in person: 59% (62 people) met them face to face in hospital and 5% (5 people) at their GP surgery. Other respondents stated they had been in touch with their medical team via email or letters. Only 2% of respondents (two people) said they had no contact with their medical team at all.

The 103 respondents who had been in contact with their medical team were asked to think back to before the pandemic and estimate what proportion of contact had been face to face, by telephone or by video. They estimated that, prior to the pandemic, around 16% of contact with their medical team was via telephone and a tiny proportion of 0.2% was via video, with 84% of consultations taking place in person. Patients and carers were asked to estimate what proportion of contact happening now was face to face, by phone or video. The 62 respondents to this question thought that **telephone has become most common form of contact with their medical team**. They estimated that the proportion of **face to face meetings has dropped by almost half to 40%, with more than half of all contact (54%) now happening by phone. While the use of video has increased 25-fold, it still only accounts for a small proportion of contact, at around 5%** (illustrated in figure1)

Figure 1



Since March 2020



Figure 1: Proportion of lung cancer patients' telephone, video and in person consultations before the COVID-19 pandemic and since the pandemic began to impact services in March 2020.

Change in ability to contact the medical team

Two thirds (66%) of the 105 respondents (69 people) said that there has been no change in their ability to contact their medical team compared to before the pandemic. A small proportion of patients (4%, 4 people) found it easier to contact their medical team. For example, two commented:

"They have been very easy to contact & very proactive in contacting me, as I was diagnosed during the lockdown I have no reference point to compare to prior to this."

"Coincidentally, the introduction of online contact about the time of Covid-19 starting has assisted in me contacting the healthcare team at hospital."

However, 22% of respondents (23 people) found it more difficult to contact their medical team.



Impact on diagnosis and treatment

Most of the survey respondents were diagnosed before the pandemic. Of the 14 who were diagnosed during the pandemic, nine patients felt the pandemic had no impact on their diagnosis but four respondents (29%) felt diagnosis was delayed because of the pandemic.

Figure 2

Do you feel that the COVID-19 pandemic has impacted on the time it took to receive a lung cancer diagnosis? (%)



- I feel that the pandemic did not impact on the time it took to receive diagnosis
- I feel diagnosis was delayed because of the pandemic
- 😑 l don't know

Figure 2: Impact of COVID-19 pandemic on lung cancer diagnosis. A) A small number (14) patients were diagnosed during the pandemic and 29% felt their diagnosis was delayed. Nearly a quarter of the 105 survey respondents (23%, 24 people) felt the pandemic had delayed their treatment. A tenth of patients (10%, 11 people) were not sure if it had had an impact and two thirds (67%, 70 people) felt there had been no impact to their treatment.

Figure 3

Do you feel that the pandemic has impacted on the time it took to receive lung cancer treatment? (%)



- I feel that the pandemic did not impact on the time it took to receive treatment
- I feel treatment was delayed because of the pandemic
- 😑 l don't know

Figure 3: Impact of COVID-19 pandemic on lung cancer treatment. All (105) survey respondents answered whether they thought the pandemic had an impact on treatment. The majority (67%) felt no impact, 23% felt their treatment was delayed and 10% didn't know.

In general, patients prefer face to face...

Asked how they preferred to have appointments, nearly three quarters (72%, 74 people) of the 103 respondents who had been in touch with their medical team said they prefer face to face appointments. Twelve respondents (12%) said they prefer telephone, six respondents (6%) prefer video, and eight (8%) said they have no preferences (Figure 4).

Figure 4

How do you prefer to have appointments? (% respondents)



Figure 4: Proportion of lung cancer patients who prefer each different type of consultation.

Three patients responded 'other', commenting that they would like a mix of telephone and face to face, depending on the situation:

"Face to face for serious stuff, telephone for routine."

"Face to face when something needs doing. Telephone when it's just to check up on things."

"In the event of no change on scans or blood tests, telephone is satisfactory. Otherwise, I prefer face to face."



... but are not given a choice between telephone or video consultation

Patients and carers were asked if they were given a choice of telephone or video if face to face appointments were not an option. The majority of the 103 respondents who had been in contact with their team (69%, 71 people) said they were not given a choice of telephone or video. Only 11% of respondents (11 people) said they were always given a choice between telephone and video, 12% (12 people) said they were mostly given the choice and 9% (nine people) said they were sometimes given the choice (Figure 5).

Figure 5

Are you given a choice of whether you would prefer a telephone or video appointment? (% respondents)



Figure 5: Proportion of lung cancer patients who, when they have an appointment, are given a choice of whether they prefer video or telephone consultation.



said they would feel either extremely comfortable or comfortable attending face to face appointments now

Patients and carers were asked how easy they found it when speaking to their medical team by telephone, video or in person. Unsurprisingly, respondents feel most comfortable with meetings in person, with 93% reporting they find the experience easy or very easy, and only 2% (two respondents) saying they found meetings in person difficult or very difficult.

The majority of patients in our survey (78%, 81 of 104 respondents) said they would feel either extremely comfortable or comfortable attending face to face appointments now (survey response period end of September until mid-October), and only 7% (seven respondents) said they did not feel comfortable with appointments in person. It's important to note that this survey was run before the tiered system of restrictions was introduced across the devolved nations, and these findings may well be different during national lockdowns or if COVID-19 deaths increase to the levels seen in the first wave of the pandemic.

Interestingly, patients were least worried about receiving bad news if the medical team were to suggest a face to face meeting - only a quarter said they'd be worried or extremely worried by this request. Patients were more likely to worry about receiving bad news if a video or phone call was suggested, with 50% and 41%, respectively, responding they'd be worried or extremely worried by this request. These data are interesting and merit more detailed exploration in future surveys.

Patients were more likely to worry about receiving bad news if a video or phone call was suggested

respectively, said they'd be worried or extremely worried by this request

Video consultations – untapped potential

Only a small number of lung cancer patients (14) in our survey had used video to talk to their medical team. Of the 14:

- 4 respondents were aged 40 49 yrs
- 4 were aged 50 59 yrs
- 5 were aged 60 69 yrs
- 1 was aged 70+ yrs

When asked, 'why haven't you used a video call?' 82% of the 89 respondents (73 people) said the medical team had not suggested a video call. Only 10% (9 people) said they do not want to do video call and 7% (six people) said they did not know how to video call (Figure 6). More research would be needed to see what proportion of patients would have been happy to try a video call if it had been offered to them. No one reported not having a computer, but since our survey was conducted online this is perhaps to be expected.

Figure 6

Why haven't you used a video call? (% respondents)

The medical team haven't suggested a video call

Don't want to do a video call

Have a computer / smartphone but don't know how to do a video call

Don't have a computer or smartphone

Other

Figure 6: Lung cancer patients explain why they haven't used video for their consultations. Each bar in the graph represents the proportion (%) of respondents to each statement

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Others commented:

"Always had face to face."

"Medical team didn't use it despite arranging for it."

"Oncologist had technical problem."

"Advised telephone call would be quicker to arrange."

"I would be concerned that skype might fail. I sometimes get flummoxed when making the connection."

Of the 14 patients who had used video, ten (71%) said they found it easy or very easy and only one patient (7%) found it very difficult. Respondents who had used video were given a list of potential difficulties and asked which, if any, they had experienced. The most common difficulties reported by the 14 patients were that they were less able to hear the doctor or nurse (reported by five (36%) of the respondents) and that video consultations were more tiring compared with face to face (reported by three (21%) of the respondents). Two patients (14%) felt less able to follow what the doctor was saying and two patients said they felt less able to make themselves understood. Patients commented that other difficulties include:

"Wanting them to see how I'm breathing but [it's] hard if they're not listening to your chest or in the room."

"One was set up but it didn't work."

"The video is distracting and I could not see my scans." However, **seven of the 14 respondents had not experienced any of the difficulties listed.** Two of the patients commented that they thought there were advantages to video consultations:

"I find it easier as mine spread to the brain and I can't drive now so video is perfect for me, but they always call even though it says video appointment it never is and that's a shame."

"I find it less stressful no parking issues, quicker, easy to understand etc."

Patients who had used video were also given a list of possible advantages to them over face to face or video calls, and asked which, if any, they had experienced. Thirteen of the 14 patients who had used video calls (93%) agreed that an advantage was that they do not need to travel to hospital so there is less risk of catching COVID-19. Ten patients (71%) thought that video appointments were more convenient because they do not need to travel to hospital.

Six patients (43%) said that it took less time out of the day than with a face to face consultation, and six (43%) said they could still see the doctor or nurse. Five (36%) said it was an advantage that the doctor or nurse could still show them pictures eg of scans, to help explain things. Two patients (14%) liked not having to wait before being seen.

of respondents find telephone consultations difficult or extremely difficult

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Telephone consultations – the common virtual solution, but not easy for all

Nine in ten of the 105 survey respondents have had telephone consultations (90%, 95 people). Of those who hadn't, when asked why they had not had a telephone call, four of the eight respondents said they had not been offered one, two were worried they would miss information, one said they struggled to hear well on the phone and one said they do video calls instead.

Asked how easy they found it to speak to their medical team by phone, just under half of the 95 respondents (49%, 47 people) reported they found phone conversations with their medical team easy or very easy. However, a fifth of the respondents (21%, 20 people) found phone consultations difficult or very difficult.

As with the video consultations, patients who had received phone consultations were given a list of possible advantages to them over face to face or video calls, and asked which, if any, they had experienced. Similar to video consultations, the most common advantages of telephone consultations seen by patients and carers were not needing to travel to hospital so less risk of catching COVID-19, reported by 78% of the 94 respondents (73 people) and that it was more convenient not having to travel to hospital (62% of respondents, 58 people). Just under half (46%) of the respondents (43 people) stated that there was less risk of catching infections other than COVID-19, 45% (42 people) said there was less time taken out their day and 43% (40 people) said not having to wait before being seen was an advantage. Three people commented that there were no advantages and one person commented "only want face to face."

Respondents who had had phone consultations were given a list of potential difficulties and asked which, if any, they had experienced. More than half (51%) of the 95 respondents (48 people) found it difficult that they could not see the doctor or a nurse. Some commented:

"[I] feel it's impossible for the medic to see how I am and how my breathing is."

"They can't see me. So much of our communication is non verbal."

"Doesn't feel personalised - it's a pretty important topic so would prefer to see their face and reactions! I'm not calling the bank for a statement!"

"Miss the eye contact and rapport."

A third (33%) of the 95 respondents (31 people) said they found it difficult that a relative was not able to join the call with them. Just over a quarter of respondents (27%, 26 people) said that they were less able to follow what the doctor or nurse is saying, and the same proportion said they were less able to be understood. Just under a fifth (19%) of the respondents (18 people) said they were less able to hear the doctor or nurse. Comments included:

"Rushed, unable to differentiate who's talking, nurse or doctor."

"Find it harder to ask questions."

"Less sense of contact, more likely to be ignored."

"It's just harder for conversation to flow."

Three patients commented that they had no set time for the call so they were caught unawares or could not prepare:

"No advance notice of the timing so they sometimes call at a difficult time to talk."

"Phone calls are not timed specifically and catch me slightly unprepared, unlike a visit to the hospital."

"Wasn't given set day or time. Oncologist called when I didn't expect so wasn't prepared."

However, opinions were mixed and 20 respondents used free text to comment that they had not experienced any disadvantages to telephone consultations.



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do	lung	cand	er	patier	nts v	want?

Patients and carers were asked how, in the future, they would like their time with the medical team to be split between face to face, telephone and video consultations. The 104 respondents suggested that, on average, they would like 22% to be by telephone, 8% by video calls, but 70% remaining face to face meetings.

Compared to what patients have experienced during the pandemic, this would be an increase in face to face and video appointments, and a decrease in phone appointments. However, compared to before the pandemic, it would be a decrease in face to face appointments, and an increase in telephone and video appointments (see Table 1).

Before Covid-19		During Covid-19	Post Covid-19	
Telephone (%) 16.1	54.2	22.4	
Video (%)	0.2	5.3	7.7	
In person (%	5) 83.7	40.4	69.9	

Table 1: Comparisons of the proportion of each type of consultation seen before and during the pandemic, and the proportion of each type of consultation that patients would like to see beyond the pandemic.

Respondents were asked which would be the **best** way to have a conversation with the medical team in different situations. The majority of people still think face to face meetings are best for all consultations. Some 95% of the 102 respondents (97 people) said meeting in person is best for finding out their diagnosis or for their first consultation, whereas only 2 or 3% or patients said video or telephone. 72% of respondents (73 people) thought face to face was better for a conversation around changing treatment. Even for regular check-ups or if you are worried about something, 55% (56 people) and 52% (53 people) respectively prefer face to face, although an increasing proportion was open to telephone consultation (illustrated in Figure 7).

Figure 7

team in the following situations? (%)



Figure 7: Patients' opinions on the best format for consultations in a range of situations. Each bar in the graph represents the proportion (%) of respondents who selected to each type of consultation



What do you think is the best way to have a conversation with the medical

		I			
	50		75		100
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Findings from the healthcare professionals survey

The data collected from the healthcare professionals survey described in this section is held on file by MSD.ⁱ

Key points

- Most healthcare professionals have been picking up the phone or still attempting to see lung cancer patients face to face during the pandemic, and they are **not routinely** using video for patient consultations.
- The majority of healthcare professionals responding to our survey believe face to face appointments are the best option for most purposes, including breaking bad news, and they do not think there are many benefits of virtual consultations beyond protecting and reassuring patients during the pandemic.
- Healthcare professionals believe virtual consultations are more convenient for patients but not necessarily convenient for them. The majority don't see them as saving healthcare professionals' time.
- Respondents believe training, increased access to computers across the NHS, better internet connections (in Trusts and patients' homes) and quiet spaces within hospitals are needed to improve virtual consultations.

Survey respondents

A total of 80 healthcare professionals responded to the survey: 33 lung cancer specialist nurses, 20 surgeons, 14 oncologists, 12 respiratory physicians and one GP. There were 39 respondents from acute general hospital trusts, 38 from tertiary cancer centres and three respondents from non-acute general hospitals. The survey results are therefore representative of the situation in secondary and tertiary care, but are not reflective of care delivered in a primary setting.

Contact with patients – pandemic switch to telephone, rather than video, consultations

Healthcare professionals were asked to estimate the Figure 8: Average proportion of healthcare professionals' virtual consultations – by telephone or video – before the pandemic, during the first wave of the pandemic and during our survey period (end of September to proportion of their consultations with patients that were virtual before the pandemic. The 80 respondents mid-October 2020). estimated that, on average, only 5% of consultations with new patients and 7% of consultations with Nurses, however, were continuing to see a higher existing patients were performed virtually - either proportion of patients virtually than other healthcare over the phone or by video. However, the 33 nurses professionals; by the time of the survey, the 14 responding to this guestion suggested the proportion oncologists estimated that 5% of their consultations was higher, at 10% of consultations with new patients with new patients and 35% of consultations with and existing patients. existing patients were virtual, compared to 36% and 55% of nurses' consultations with new and existing Respondents agreed that, during the first wave, patients respectively.

Respondents agreed that, during the first wave, the proportion of virtual consultations had increased, estimating that, on average, this had risen to 47% of consultations with new patients and 75% of consultations with existing patients, respectively. As before, the nurses in the survey were undertaking a larger proportion of consultations virtually than other healthcare professionals.

However, even though COVID-19 cases began to rise again during the survey period (late-September to mid-October), the proportion of virtual consultations on average had reduced to 28% for new patients and 53% for existing patients, suggesting the efforts made to 'restart' NHS cancer services also saw face to face consultations return where possible, particularly among new patients where relationships with the medical team may not yet established (summarised in Figure 8).

MSD

MSD

Figure 8



What proportion of your consultations with patients were virtual during each of the time frames below? (%)

Tertiary cancer centres had the lowest proportion of virtual consultations for both new and existing patients before, during and after the first wave of the pandemic. Nurses were more likely to use virtual consultations than other healthcare professionals.

Since March 2020, telephone consultations have become the most common form of consultation between healthcare professionals and their patients. Respondents estimated that around **61% of their consultations were done over the phone.** On average, respondents estimated that around 34% of their appointments have been face to face since March, however, nearly half (49%) of oncologists' appointments are still conducted face to face.

Respondents estimated that they used video in only 5% of their consultations, and 51% of survey respondents reported they do not use video for patient consultations at all. For those that do use video, NHS Attend Anywhere was the most common platform, used by 36% of respondents (29 professionals) for patient consultations.

MSD

Breaking bad news in person

When considering offering a lung cancer patient a telephone or video consultation, 90% of survey respondents (72 of 80 respondents) felt it was either important or extremely important to consider whether the healthcare professional is breaking bad news or not. Other key considerations were felt to be whether the patient has hearing, speech or language difficulties, whether the patient can have a family member present or if you know the patient has easy access to a computer.

Healthcare professionals were asked which channels they thought were the *best* to communicate in different scenarios (Figure 9). The vast majority of survey respondents believe face to face consultations are best for most purposes, particularly when breaking bad news (99%, 79 professionals), communicating a diagnosis (95%, 76 professionals), first consultation (91%, 73 professionals), moving from active treatment to palliative care (96%, 77 professionals) and changing the treatment plan (76%, 61 professionals). Telephone was found to be the least acceptable medium of communication in these circumstances. However, responses were more varied for other types of consultation, and more healthcare professionals in our survey selected telephone appointments as the best channel for routine consultations and managing patient queries or worries (for both, 45% of respondents selected telephone over video and face to face).

Healthcare professionals were also asked which channels they thought were *acceptable to* communicate with in different scenarios. Telephone was often considered the least acceptable option for communication, with only three in ten (30%, 24 professionals) thinking it an acceptable means to communicate a diagnosis, 19% (15 professionals) thinking it acceptable for sharing bad news, and a quarter (25%, 20 respondents) for conversations about moving from active treatment to palliative care.

However, 96% of respondents (77 professionals) thought telephone acceptable for routine consultations, and 90% (72 professionals) thought it acceptable to follow up after recent treatment.

of healthcare professionals said face to face consultations are best for breaking bad news

Figure 9

Which channel do you think works best in the following situations? (% respondents)



Figure 9: Healthcare professionals' opinions on the best format for consultations for a range of situations. Each bar in the graph represents the proportion (%) of respondents who selected to each type of consultation.

The challenges of virtual consultations for healthcare professionals

"It is much easier when you can show patients and their relatives scans"

"[The] flow of conversation[is] more difficult. Feels less natural."

Virtual consultations pose a number of challenges for clinicians in delivering consultations. The survey provided a list of potential challenges, and asked respondents which, if any, they had experienced and how frequently. The four most common regular problems reported by our survey respondents were:

- Healthcare professionals are not able to easily show patients visual material such as scans, reported by 73% (58 of 79 professionals) as a regular problem
- Lack of face to face contact impacts on doctor-patient communication, reported by 72% of respondents (57 professionals)
- 68% (54 respondents) reported they felt less able to spot a change in condition, side effects or adverse event
- 65% (51 professionals) said a lack of computer equipment in order to hold video consultations was a regular problem

reported that lack of face to face contact impacts on doctorpatient communication

72%



Of the 24 healthcare professionals who responded to the question 'do you change the way that you communicate with patients when you use virtual video consultations as opposed to face to face appointments / phone calls' **three quarters of respondents (75%, 18 professionals) said they did not.** A quarter (25%, 6 professionals) did make changes to help overcome communication challenges, with two respondents commenting:

"I can send results before hand to inform discussion, and send links and other info to prepare."

"I can share scans and another screen on near me/ attend anywhere. It's a different preparation than face to face clinic. I also share these at the end of a call in case there are technical problems – this can mean a longer consultation as I have to go back over previously discussed issues."

Advantages beyond the pandemic?

Some 90% of the 79 healthcare professionals who responded to this question believed an advantage of virtual consultations lay in reducing the risk to the patient of contracting infection while travelling to or in the hospital (71 professionals). 85% (67 professionals) believed virtual consultations reassure patients on their risk of contracting infection, as they do not need to travel. The only other advantage identified by the majority of healthcare professionals was that they believe virtual consultations are more convenient for patients (75%, 59 professionals).

Only 44% of respondents thought virtual consultations provides faster access to appointments for lung cancer patients (35 professionals). Only three in ten healthcare professionals thought delivering consultations virtually was more convenient for them (30%, 24 professionals) and 28% (22 professionals) thought they take less time than a face to face consultation. Only 3% of respondents thought there were no advantages to virtual consultations. Some additional advantages described by healthcare professionals were:

"Fewer costs for patients – e.g., taxi, bus, parking," and "Money saved for patient re travel costs / parking."

"Patients often appear more relaxed in their home environment, avoid travel and might find it easier to have family members present."

"Patient choice," and "Flexibility."

"Travel often requires and overnight stay for my remote and rural patients, the Near Me [platform] can get the patient seen quicker with less hospital attendances required."



But only

75%

of healthcare professionals believe virtual consultations are more convenient for patients said virtual appointments were more convenient for them

Making virtual consultations useful for patients

One way to improve the patient experience of virtual consultations could be to provide training to those delivering them. More than three quarters (76%) of healthcare professionals responding to the survey reported they had not received training or guidance specific to delivering virtual consultations (60 of 79 professionals). Of the 60 professionals who had no training, 60% said they would have liked training (36 professionals). One healthcare professional commented:

"It is a completely different skill and had no advice or support in trying to ensure we still provide good care."

When asked what training they would find helpful, 38 healthcare professionals responded with suggestions. Some suggested technical help and guidance on consent, safeguarding and confidentiality. Others commented they'd like training on areas including:

"How to navigate the various platforms, screen sharing etc.. Also would have been nice to have been reassured how patients' details are safe on platforms such as Zoom etc."

"[The] best way to discuss difficult news. Pre warn so relatives available but how to do this?"

"How to conduct consultation efficiently. Any key checks - eg, check identity, who is in the room/ house, can they hear."

"How to reasonably roll out a potential video clinic to a large number of often frail and older patients who may be less able to manage such technologies or to afford relevant equipment e.g. smart phones." Of the 19 professionals who had received training, 84% (16 professionals) had found it useful. Some commented they were shown how to share scans, two respondents had completed Microsoft Teams training on Attend Anywhere, and another commented they had received training from their IT team on the technical aspects.

Regarding what might make video or telephone consultations more useful to them or to patients, almost all (78 of 79) respondents provided their views, but the responses were varied. The most common response from healthcare professionals concerned the need for better IT equipment and Wi-Fi or mobile data, for both themselves and for patients, commenting:

"Easy, reliable technology both for very aged NHS infrastructure and for ease for patients."

"We do not have access to webcams, software or private space for video consultations, only telephone consultations."

"I assume the skill needed for video calls depends on how IT savvy the patient is. Our patient population is older and is likely to be less IT skilled. Simple, user friendly software would be good including being able to access Wi-Fi or 4G."

Another commented they need "allotted time to conduct them / quiet space," and another respondent said, "I just need more experience!"

Some healthcare professionals were more experienced than others, stating:

"I've been doing this for years and am very comfortable with it. We have surveyed patients regularly and they find this medium very acceptable."

"It is often very useful - and more convenient and more timely for patient." "Telephone consultations for new patients have been a part of our practice for 5 years, however we give choice of a face to face consultation if they prefer or if there is a cognitive or physical reason why telephone consultation [is] inappropriate. I don't feel you can make blanket statements that tel/video consultation are best for certain consultations, it's very individual what might be right, ideally you need a service that is flexible & utilises both face to face & tel/ video consultations."

However, other respondents were not so positive towards virtual consultations, stating a clear preference for face to face interaction with patients and, when asked what might make video or telephone consultations more useful, responded:

"Nothing. It is not a replacement for face to face consultations. It is a distraction brought on by a crisis but is not a long-term solution unless teleportation is available."

"Nothing. They are a terrible idea. Cancer care needs to be delivered face to face so you can assess the patient properly and check understanding. Video and telephone consultations are bad medicine and stop me doing my job properly."



Discussion**

During the first wave of the COVID-19 pandemic, healthcare professionals worked hard to keep lung cancer patients out of hospital and at home if they could, to reduce patients' risk of catching a virus that posed a serious threat to life. Alternative options to face to face consultations had to be quickly found.

When the pandemic took hold in March 2020, lung cancer patients and healthcare professionals had some experience with phone consultations but little with video. Our survey shows that there have been, and remain, substantial challenges in ensuring the virtual consultations - both telephone and video work well for clinicians, patients and carers.

At present, for most lung cancer patients, a virtual consultation means a telephone appointment, and these are not easy for everyone. Many patients miss the visual cues and contact from face to face conversations, and those who are hard of hearing have particular problems with following conversations.

Video, by contrast, has yet to be adopted at scale. Only 13% of lung cancer patients in our survey had received video consultations, compared to 90% who had phone consultations. Since the survey was online, it selected for people who have computer access; only a small percentage of respondents said they don't want to video call or didn't know how to video call. So why hasn't video been more widely adopted?

The majority (82%) of respondents said their medical team haven't suggested video. Our survey has brought to light a variety of reasons that may begin to explain why this might be the case. These range from patient safety concerns (professionals feeling less able to spot a change in condition) and disruption to the flow of communication / ability to share scans, to poor digital infrastructure. Although potentially more convenient for some patients, less than a third of healthcare professionals reported that video consultations are more convenient for them. Some report there are few guiet spaces in a hospital to be able to deliver video consultations. Only 28% said virtual appointments take less time than face to face. If video consultations are to be adopted at pace and scale - for example to help address increasing patient waiting lists^{viii} - these issues will need to be examined further and addressed.

It seems that for the majority of lung cancer patients and their medical teams, nothing is as good as face to face.

Both patients and professionals believe meetings in person are the best options for most consultation purposes. Even now, healthcare professionals are making an effort to restore face to face appointments where possible - with virtual consultations for new patients dropping to 28%.

Lung cancer patients tend to be diagnosed at a late stage and the seriousness and urgency relating to their situation could be a reason why both patients and professionals would want to see each other in person. As both healthcare professionals and patients have pointed out, it is not always possible to thoroughly assess a patient's condition virtually (particularly by phone).

Face to face contact is felt especially important for breaking bad news, for which 99% of healthcare professionals agreed in person meetings are best. There is a potential danger here: if more routine consultations are done virtually, patients may come to expect that a request for a face to face meeting means bad news. But actually, the patients in our survey were least worried about the news being bad if they were offered a face to face meeting - more patients worried they would receive bad news when offered a video or telephone appointment. While this finding is interesting, a more detailed exploration in a wider group of patients is needed before drawing conclusions.

Although in person remains the preference, our survey suggests that some patients at least are open to a higher proportion of video consultations than they received before or during the pandemic, with telephone appointments for more routine consultations. We recognise the limitations of the online survey methodology and sample size. Further research will be required to ascertain the preferences and needs of patients who do not have access to a computer, and how well telephone consultations work for them. We also recognise that the vast majority of respondents were female. This is not an unusual phenomenon in online polls of lung cancer patients: in a recent global online survey of more than 900 lung cancer patients and carers, around three quarters (73%) of the respondents identified as female, including 74% female respondents from the UK^{ix}. However, an effort should be made in subsequent research to ensure these views are representative of people who identify as male.

Looking to the future, how could virtual consultations be made to work better in the lung cancer treatment pathway?

One way to improve the experience for patients and their medical teams could be to provide healthcare professionals with training to support both communication and technical aspects involved in the delivery of virtual consultations. Despite the increase in their use, around three guarters of healthcare professionals hadn't received any training on virtual consultations. More than half of those who hadn't received training expressed a desire to receive it. and 84% of those who had received training found it helpful.

What is clear from the two surveys is that there are a range of preferences between patients and no onesize-fits all approach will do. Where possible, patients should be offered a choice so they are able to get the most out of the consultation and of their experience within the lung cancer pathway.

References

- Data on file the responses to patient/carer and healthcare professionals surveys on their experience of virtual consultations.
- NHS England and NHS Improvement, Clinical guide for the management of remote consultations and remote working in secondary care during the coronavirus pandemic, 27 March 2020. Available at: https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/C0044-Specialty-Guide-Virtual-Working-and-Coronavirus-27-March-20.pdf
- iii NHS (2020). Who's at higher risk from coronavirus? Available at: https://www.nhs.uk/conditions/coronavirus-covid-19/people-at-higher-risk/whos-at-higher-risk-from-coronavirus/#:~:text=People%20 at%20moderate%20risk%20((such%20as%20henatitis
- iv NHS England, Five Year Forward View, October 2014. Available at: https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf
- a Framework for Action, November 2014.
- vi National Voices, The Dr Will Zoom You Now: Insight Report, July 2020.
- vii British Medical Association (2020). COVID-19: video consultations and homeworking. Available at: https://www.bma.org.uk/advice-and-support/covid-19/adapting-to-covid/covid-19-video-consultations-and-homeworking
- viii Griffin, S. Covid-19: Waiting times in England reach record highs BMJ 2020; 370 :m3557. Available at: https://doi.org/10.1136/bmj.m3557
- news/Patient%20experience%20survey%20global%20report%20-%202019.docx

National Information Board, Personalised Health and Care 2020: using Data and Technology to Transform Outcomes for Patients and Citizens

Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/384650/NIB_Report.pdf

Available at: https://www.nationalvoices.org.uk/sites/default/files/public/publications/the_dr_will_zoom_you_now__insights_report-min.pdf

ix Global Lung Cancer Coalition (2019). Report from a global survey of patient experience. Available here: http://www.lungcancercoalition.org/uploads/

Appendix I

Patient and carer survey

The patient and carer survey was distributed by the Roy Castle Lung Cancer Foundation via email newsletter, social media channels and the organisation's website. Patient and carer participants were advised:

- Everyone will be asked to share their experiences and opinions only
- The survey will be confidential (no identifying information about you or other patients will be collected)
- The collective results (from all participants) will be available to The Roy Castle Lung Cancer Foundation, as well as MSD, the pharmaceutical company sponsoring this research
- If you report any unexpected side effects or issues you've had with any treatments, we'll make sure they are reported to the sponsoring pharmaceutical company properly

Survey questions

Section 1 - Demographic information

Q1 What is your gender?

Q2 What is your experience with lung cancer?

Q3

What type of lung cancer [IF PATIENT: have you IF CARER: has the person you care for] been diagnosed with?

Q4

What stage of lung cancer [IF PATIENT: do you IF CARER: does the person you care for] have?

Q5

Do you know whether there is a genetic mutation associated with [IF PATIENT: your IF CARER: their] lung cancer

Q6

How old were [IF PATIENT: you IF CARER: they] when you / they were diagnosed with [IF Q2_01 OR Q2_02: lung cancer IF Q2_03 OR Q2_04: cancer]?

Q7

In which year were [IF PATIENT: you IF CARER: they] diagnosed with [IF Q2_01 OR Q2_02: lung cancer IF Q2_03 OR Q2_04: cancer]?

Q8 Do you have a family member or carer who helps you?

Section 2 - Contact with your medical team

Next we would like to ask you a few questions about your medical team.

Q9

With which members of the medical team have you discussed [IF PATIENT: your IF CARER: their] [IF Q2_01 OR Q2_02: lung cancer IF Q2_03 OR Q2_04: cancer] and treatment since the start of the COVID-19 pandemic?

Q10

With which member of your medical team have you discussed [IF PATIENT: your IF CARER: their] [IF Q2_01 OR Q2_02: lung cancer IF Q2_03 OR Q2_04: cancer] and its treatment most frequently?

Q11

Since the start of the COVID-19 pandemic, how would you assess your ability to contact the medical team when compared to before the pandemic?

Q12

Do you feel that the COVID-19 pandemic has impacted on the time it took to receive [IF PATIENT: your IF CARER: their] [IF Q2_01 OR Q2_02: lung cancer IF Q2_03 OR Q2_04: cancer] diagnosis?

Q13

Do you feel that the COVID-19 pandemic has impacted on the time it took to receive [IF PATIENT: your IF CARER: their] [IF Q2_01 OR Q2_02: lung cancer IF Q2_03 OR Q2_04: cancer] treatment?

Section 3 - How patients are in touch with their medical team

Now we would like to focus a bit on how you communicate with the medical team.

Q14

Since the start of the COVID-19 pandemic, have you had conversations about [IF PATIENT: your IF CARER: their] [IF Q2_01 OR Q2_02: lung cancer IF Q2_03 OR Q2_04: cancer] and its treatment with the medical team in the following ways? *Please tick all that apply.*

Q14b

Why haven't you had any contact with the medical team since the start of COVID-19? *Please tick all that apply.*

Q15

Which video software or app did you use? Please tick all that apply.

Q16

Thinking back to before the COVID-19 pandemic, how was the medical team contact allocated.

hout now how is the medical team

Thinking about now, how is the medical team contact allocated.

Q18

017

Approximately how many times since the start of the COVID-19 pandemic have you been in touch with the medical team in the following ways?

Q19

When [IF PATIENT: you IF CARER: they] have an appointment, are you given a choice of whether: you would prefer telephone or video, if [IF PATIENT: you IF CARER: they] can't meet face to face?

Q20

How do you prefer to have appointments? *Please tick all that apply.*

Q21

Thinking about when you speak to the medical team by video or telephone or in person, how easy do you find it? Please rank on a scale of 1 to 5, where 1 is very difficult and 5 is very easy.

Section 4 - Video consultations

Q22a

Thinking about video consultations, which if any of the following difficulties have you experienced?

Q22b

Please indicate the most problematic difficulty experienced, then the second most [IF MENTION 3+ and then the third most problematic.] RANK ORDER TOP 3. ONLY SHOW ONES MENTIONED

Q23

Thinking about video consultations, do you think there are any advantages to them, over face to face consultations or telephone calls?

Q24

Why haven't you used a video call?

Section 5 - Telephone consultations

Q25a

Thinking about telephone consultations, which if any of the following difficulties have you experienced?

Q25b

Please indicate the most problematic difficulty experienced, then the second most [ASK IF MENTION 3+ IN q25a: and then the third most problematic.] RANK ORDER TOP 3. ONLY SHOW ONES MENTIONED

Q26a

Thinking about telephone consultations, do you think there are any advantages to them, over face to face consultations?

Q26b

Why haven't you had a meeting by telephone?

Section 6 - Beyond the pandemic

Q27a

How comfortable would you feel towards attending a face to face appointment, if the medical team were to suggest one now? Please rank on a scale of 1 to 5, where 1 is not at all comfortable and 5 is extremely comfortable.

Q27b

How worried would you be about receiving bad news if the medical team were to suggest the following types of meetings? Video / Telephone / Face to face

Q28

How comfortable would you feel towards attending a face to face appointment, if the medical team were to suggest one now? Please rank on a scale of 1 to 5, where 1 is not at all comfortable and 5 is extremely comfortable.

Q29a

What do you think is an acceptable way to have a conversation with the medical team in the following situations:

Q29b

What do you think is the best way to have a conversation with the medical team in the following situations?

Q30

What is the biggest change that could be made to improve the experience with video or phone meetings with physicians?

Q31

Please let us know how you found out about this survey.

Appendix II

Healthcare professional survey

The healthcare professional survey was distributed by the UK Lung Cancer Coalition, British Thoracic Oncology Group and Lung Cancer Nursing UK via email newsletters to members, social media channels and linked to via their respective websites. Healthcare professional participants were advised:

- All participants will be asked to share their experiences and opinions
- The survey covers both use of virtual meetings to support decision-making within the MDT, as well as consultations with patients
- The research is being conducted by an independent, healthcare specialising market research agency called HRW and is conducted in accordance with all market research industry guidelines
- The survey will be confidential (no identifying information about you or other participating HCPs will be collected)
- The survey has been developed independently, but with financial support from MSD
- The aggregated results will be available to the UKLCC, BTOG and LCNUK as well as the pharmaceutical company (MSD) sponsoring this research
- In accordance with the guidelines, any adverse events that are reported within the survey will also be reported following MSD's Drug Safety Policy
- We estimate it will take approximately 10-15 minutes to complete

Survey questions

Section 1: Demographic information

Q1 What is your professional specialism?

Q2 What type of centre are you based in?

Q3 Which video software or apps do you use?

Section 2 - Engaging with patients using video and phone consultations

Next, we would like to ask you a few questions about engaging with patients using phone and video consultations.

Q4

What proportion of your consultations with patients were virtual, that is by telephone or video during each of the time frames below?

Q5

Since March 2020, what proportion of your consultations with patients were using the following channels?

Q6

How important are each of these factors when considering whether to offer a patient a video or phone consultation, instead of face to face? Please use a scale of 1 to 5 where 5 is extremely important and 1 is not important at all.

Q7a

Which channels do you think are acceptable in the following situations? Please tick all that apply for each of the following.

Q7b

Which channel do you think works best in the following situations? Please tick either video, telephone or face to face for each of the following.

Q8

What challenges have you experienced with virtual consultations, either by phone or video? Please rank on a scale of 1 to 5, where 1 is a regular problem and 5 is never a problem.

Q9

Do you change the way that you communicate with patients when you use virtual video consultations as opposed to face to face appointments / phone calls? For example, do you share any written or visual material, such as scans, in advance? Q9a If yes, please tell us more.

Q10 What advantages do you see to virtual consultations by phone or video, over face to face consultations?

Q11 Have you had any training or guidance on doing consultations by video or telephone?

Q11a Please tell us more about the training you have had and what was particularly helpful.

Q11b Please tell us what sort of training, if any, you would find helpful.

Q12

What, if anything, could make video or telephone consultations more useful to you or to patients?

Q12a

Why haven't you used phone or video consultations with your patients since March?

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